



Robert Greene Sterne Edward J. Kessler Jorge A. Goldstein David K.S. Cornwell Robert W. Esmond Fracy-Gene G. Durkin Michael B. Ray Robert E. Sokohl Eric K. Steffe Michael Q. Lee Steven R. Ludwig John M. Covert Linda E. Alcorn Robert C. Millonig Donald J. Featherstone Lawrence B. Bugaisky Michael V. Messinger

Judith U. Kim Timothy J. Shea, Jr. Patrick E. Garrett Heidi L. Kraus Edward W. Yee Albert L. Fero\* Donald R. Banowit Peter A. Jackman Teresa U. Medler Jeffrey S. Weaver Kendrick P. Patterson Vincent L. Capuano Eldora Ellison Floyd Thomas C. Fiala Brian J. Del Buono Virgil Lee Beaston Kimberly N. Reddick Theodore A. Wood Elizabeth J. Haanes Joseph S. Ostroff Frank R. Cottingham Christine M. Lhulier Rea Lynn Prengaman Jane Shershenovich\* George S. Bardnessen Jason D. Eisenberg Michael D. Specht Andrea J. Kamage Tracy L. Muller\* LuAnne M. DeSantis John J. Figueroa Ann E. Summerfield Tiera S. Coston Aric W. Ledford\* Jessica L. Parezo

Timothy A. Doyle\*
Gaby L. Longsworth\*
Nicole D. Dretar\*
Ted J. Ebersole
Jyoti C. Iyer\*

Registered Patent Agents\*
Karen R. Markowicz
Nancy J. Leith
Helene C. Carlson
Matthew J. Dowd
Aaron L. Schwartz
Katrina Y. Pei Quach
Bryan L. Skelton
Robert A. Schwartzman
Teresa A. Colella
Jeffrey S. Lundgren
Victoria S. Rutherford

Eric D. Hayes Michelle K. Holoubek Robert H. DeSelms Simon J. Elliott Julie A. Heider Mita Mukherjee Scott M. Woodhouse

Of Counsel Kenneth C. Bass III Evan R. Smith Marvin C. Guthrie

\*Admitted only in Maryland

\*Admitted only in Virginia

•Practice Limited to
Federal Agencies

July 8, 2004

WRITER'S DIRECT NUMBER: (202) 772-8675 INTERNET ADDRESS: JHELVEY@SKGF.COM

Art Unit 2614

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Re:

U.S. Utility Patent Application

Appl. No. 10/812,949; Filed: March 31, 2004

For: Apparatus and Method for Feed-Forward Image Rejection in a Dual

**Conversion Receiver** 

Inventors:

Dauphinee et al.

Our Ref:

1875.4900001

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. An original executed Power of Attorney from Assignee;
- 2. An original executed Statement Under 37 C.F.R. § 3.73(b) from Assignee (with a copy of Assignment attached); and
- 3. Return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Sterne, Kessler, Goldstein & Fox PLL.C. : 1100 New York Avenue, NW : Washington, DC 20005 : 202.371.2600 f 202.371.2540 : www.skgf.com

Commissioner for Patents July 8, 2004 Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Jeffrey T. Helvey Attorney for Applicants Registration No. 44,757

JTH/agj 285543 1.DOC



## POWER OF ATTORNEY FROM ASSIGNEE

Broadcom Corporation, a corporation of California, having a principal place of business at 16215 Alton Parkway, Irvine, California 92618-3616, is assignee of the entire right, title and interest for the United States of America (as defined in 35 U.S.C. § 100), by reason of an Assignment to the Assignee executed on (1.) May 6, 2004 and (2.) May 10, 2004 of an invention known as Apparatus and Method for Feed-Forward Image Rejection in a Dual Conversion Receiver (Attorney Docket No. 1875.4900001), which is disclosed and claimed in a patent application of the same title by the inventor(s) (1.) Leonard Dauphinee and (2.) Lawrence M. Burns (said application filed on March 31, 2004 at the U.S. Patent and Trademark Office, having Application Number 10/812,949).

For the purpose of PAIR, the Customer Number is 26111.

The Assignee hereby appoint the U.S. attorneys James D. Bennett, Registration No. 37,550, Jeffrey DeRoy Wheeler, Registration No. 39,066; Noel Benjamin Whitley, Registration No. 42,225; and Harry Shannon Tyson, Jr., Registration No. 42,193, of Broadcom Corporation, 16215 Alton Parkway, Irvine, CA 92618-3616, and the attorneys associated with CUSTOMER NUMBER 28393 to prosecute this application and any continuation, divisional, continuation-in-part, or reissue application thereof, and to transact all business in the U.S. Patent and Trademark Office connected therewith, such attorneys currently being: Robert Greene Sterne, Esq., Reg. No. 28,912; Edward J. Kessler, Esq., Reg. No. 25,688; Jorge A. Goldstein, Esq., Reg. No. 29,021; David K.S. Cornwell, Esq., Reg. No. 31,944; Robert W. Esmond, Esq., Reg. No. 32,893; Tracy-Gene G. Durkin, Esq., Reg. No. 32,831; Michele A. Cimbala, Esq., Reg. No. 33,851; Michael B. Ray, Esq., Reg. No. 33,997; Robert E. Sokohl, Esq., Reg. No. 36,013; Eric K. Steffe, Esq., Reg. No. 36,688, Michael Q. Lee, Esq., Reg. No. 35,239; Steven R. Ludwig, Esq., Reg. No. 36,203; John M. Covert, Esq., Reg. No. 38,759; Linda E. Alcorn, Esq., Reg. No. 39,588; Lawrence B. Bugaisky, Esq., Reg. No. 35,086; Donald J. Featherstone, Esq., Reg. No. 33,876; Robert C. Millonig, Esq., Reg. No. 34,395; Michael V. Messinger, Esq., Reg. No. 37,575; Judith U. Kim, Esq., Reg. No. 40,679; Timothy J. Shea, Jr., Esq., Reg. No. 41,306; and Patrick E. Garrett, Esq., Reg. No. 39,987. The Assignee hereby grants said attorneys the power to insert on this Power of Attorney any further identification that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

Send correspondence to:

Customer Number 26111
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
U.S.A.

FOR: Broadcom Corporation

SIGNATURE: 

BY: Dee Henderson

TITLE: Manager, Intellectual Property Portfolio

DATE: 7,2004



PTO/SB/98 (08-03)
Approved for use through 07/31/2008. OMB 0851-0031
U.S. Patent and Trademark Office; U.S. DEPART MENT OF COMMERCE
Under the Pagework Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b) 1875.4900001
Applicant/Patent Owner: (1.) Leonard Dauphinee and (2.) Lawrence M. Burns
Application No./Patent No.: 10/812,949 Filed/Issue Date: March 31, 2004
Entitled: Apparatus And Method For Feed-Forward Image Rejection In A Dual Conversion Receiver
Broadcom Corporation , a <u>corporation</u> (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)
states that it is:  1. 🔀 the assignee of the entire right, title, and interest; or
2. an assignee of less than the entire right, title and interest.  The extent (by percentage) of its ownership interest is ——————————————————————————————————
A. [ ] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
OR
B. [ ] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:
From:  The document was recorded in the Patent and Trademark Office at  Reel, Frame, or for which a copy thereof is attached.
2. From:To:To:To:The document was recorded in the Patent and Trademark Office at
Reel, Frame, or for which a copy defect is attached.
3. From:
[ ] Additional documents in the chain of title are listed on a supplemental sheet.
[X] Copies of assignments or other documents in the chain of title are attached. [NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302.08]
The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.  Dee Henderson
Typed or printed name  249 9710 - 5958
Telephone number Signature
Manager, Intellectual Property Portfolio

This collection of Information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Docket No. BP 3025 / 1875.4900001

## ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventor(s): (1.) Leonard Dauphinee, and (2.) Lawrence M. Burns, the undersigned inventor(s) hereby sell(s) and assign(s) to Broadcom Corporation (the Assignee) his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages:

check applicable box(es)

☑ for the United States of America (as defined in 35 U.S.C. § 100), ☑ and throughout the world,

- (a) in the invention(s) known as <u>Apparatus and Method for Feed-Forward Image Rejection in a Dual Conversion Receiver</u> for which application(s) for patent in the United States of America has (have) been executed by the undersigned on (1.) March 24, 2004, and (2.) March 25, 2004 (also known as United States Application No. 10/812,949, filed March 31, 2004), in any and all applications thereon, in any and all Letters Patent(s) therefor, and
- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventor(s) agree(s) to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient.

The undersigned inventor(s) agree(s) to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

Page 1 of 2

DO NOT FORWARD
TO ASSIGNMENT BRANCH
NOT FOR RECORDATION

Docket No. BP 3025 / 1875 A900001

The undersigned inventor(s) hereby represent(s) that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned hereby grant(s) James D. Bennett, Registration No. 37,550, Jeffrey DeRoy Wheeler, Registration No. 39,066; Noel Benjamin Whitley, Registration No. 42,225; and Harry Shannon Tyson, Jr., Registration No. 42,193, of Broadcom Corporation, 16215 Alton Parkway, Irvine, CA 92618-3616, and Robert Greene Sterne, Esquire, Registration No. 28,912; Edward J. Kessler, Esquire, Registration No. 25,688; Jorge A. Goldstein, Esquire, Registration No. 29,021; David K.S. Cornwell, Esquire, Registration No. 31,944; Robert W. Esmond, Esquire, Registration No. 32,893; Tracy-Gene G. Durkin, Esquire, Registration No. 32,831; Michele A. Cimbala, Esquire, Registration No. 33,851; Michael B. Ray, Esquire, Registration No. 33,997; Robert E. Sokohl, Esquire, Registration No. 36,013; Eric K. Steffe, Esquire, Registration No. 36,688; Michael Q. Lee, Esquire, Registration No. 35,239; Steven R. Ludwig, Esquire, Registration No. 36,203; John M. Covert, Esquire, Registration No. 38,759; Linda E. Alcorn, Esquire, Registration No. 39,588; Lawrence B. Bugaisky, Esquire, Registration No. 35,086; Donald J. Featherstone, Esquire, Registration No. 33,876; Robert C. Millonig, Esquire, Registration No. 34,395; Michael V. Messinger, Esq., Registration No. 37,575; Judith U. Kim, Esq., Registration No. 40,679; Timothy J. Shea, Jr., Esq., Registration No. 41,306; and Patrick E. Garrett, Esq., Registration No. 39,987; all of STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 New York Avenue, N.W., Washington, D.C. 20005-3934 power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

(1.) Date: X 5/6/04	Signature of Inventor: Leonard Dauphinee
	Signature of Inventor: X  Lawrence M. Burns

IN WITNESS WHEREOF, executed by the undersigned inventor(s) on the date opposite his/her name.

Page 2 of 2

## **ASSIGNMENT**

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventor(s): (1.) Leonard Dauphinee, and (2.) Lawrence M. Burns, the undersigned inventor(s) hereby sell(s) and assign(s) to Broadcom Corporation (the Assignee) his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages:

check applicable box(es)

☑ for the United States of America (as defined in 35 U.S.C. § 100), ☑ and throughout the world,

- (a) in the invention(s) known as Apparatus and Method for Feed-Forward Image Rejection in a Dual Conversion Receiver for which application(s) for patent in the United States of America has (have) been executed by the undersigned on (1.) March 24, 2004, and (2.) March 25, 2004 (also known as United States Application No. 10/812,949, filed March 31, 2004), in any and all applications thereon, in any and all Letters Patent(s) therefor, and
- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventor(s) agree(s) to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient.

The undersigned inventor(s) agree(s) to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

The undersigned inventor(s) hereby represent(s) that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned hereby grant(s) James D. Bennett, Registration No. 37,550, Jeffrey DeRoy Wheeler, Registration No. 39,066; Noel Benjamin Whitley, Registration No. 42,225; and Harry Shannon Tyson, Jr., Registration No. 42,193, of Broadcom Corporation, 16215 Alton Parkway, Irvine, CA 92618-3616, and Robert Greene Sterne, Esquire, Registration No. 28,912; Edward J. Kessler, Esquire, Registration No. 25,688; Jorge A. Goldstein, Esquire, Registration No. 29,021; David K.S. Cornwell, Esquire, Registration No. 31,944; Robert W. Esmond, Esquire, Registration No. 32,893; Tracy-Gene G. Durkin, Esquire, Registration No. 32,831; Michele A. Cimbala, Esquire, Registration No. 33,851; Michael B. Ray, Esquire, Registration No. 33,997; Robert E. Sokohl, Esquire, Registration No. 36,013; Eric K. Steffe, Esquire, Registration No. 36,688; Michael Q. Lee, Esquire, Registration No. 35,239; Steven R. Ludwig, Esquire, Registration No. 36,203; John M. Covert, Esquire, Registration No. 38,759; Linda E. Alcorn, Esquire, Registration No. 39,588; Lawrence B. Bugaisky, Esquire, Registration No. 35,086; Donald J. Featherstone, Esquire, Registration No. 33,876; Robert C. Millonig, Esquire, Registration No. 34,395; Michael V. Messinger, Esq., Registration No. 37,575; Judith U. Kim, Esq., Registration No. 40,679; Timothy J. Shea, Jr., Esq., Registration No. 41,306; and Patrick E. Garrett, Esq., Registration No. 39,987; all of STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 New York Avenue, N.W., Washington, D.C. 20005-3934 power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, executed by the undersigned inventor(s) on the date opposite his/her name.

(1.) Date: X	Signature of Inventor: **
-i. /	Leonard Dauphinee
(2.) Date: X 5/10/04	Signature of Inventor: X XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
/ /	Danielioc IVI. Dullis